

**Thermal performance of windows and doors -
Determination of thermal transmittance by the hot-box
method - Part 1: Complete windows and doors**

EESTI STANDARDI EESSÕNA

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Thermal performance of windows and doors - Determination of thermal transmittance by the hot-box method - Part 1: Complete windows and doors (ISO 12567-1:2010)

Isolation thermique des fenêtres et portes - Détermination de la transmission thermique par la méthode à la boîte chaude - Partie 1: Fenêtres et portes complètes (ISO 12567-1:2010)

Wärmotechnisches Verhalten von Fenstern und Türen - Bestimmung des Wärmedurchgangskoeffizienten mittels des Heizkastenverfahrens - Teil 1: Komplette Fenster und Türen (ISO 12567-1:2010)

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Foreword

This document (EN ISO 12567-1:2010) has been prepared by Technical Committee ISO/TC 163 "Thermal performance and energy use in the built environment" in collaboration with Technical Committee CEN/TC 89 "Thermal performance of buildings and building components" the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2011, and conflicting national standards shall be withdrawn at the latest by January 2011.

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Endorsement notice

The text of ISO 12567-1:2010 has been approved by CEN as a EN ISO 12567-1:2010 without any modification.

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Introduction

The method specified in this part of ISO 12567 is based on ISO 8990. It is designed to provide both standardized tests, which enable a fair comparison of different products to be made, and specific tests on products for practical application purposes. The former specifies standardized specimen sizes and applied test criteria.

The determination of the aggregate thermal transmittance is performed for conditions which are similar to the actual situation of the window and door in practice.

Thermal performance of windows and doors — Determination of thermal transmittance by the hot-box method —

Part 1: Complete windows and doors

1 Scope

This part of ISO 12567 specifies a method to measure the thermal transmittance of a door or window system. It is applicable to all effects of frames, sashes, shutters, blinds, screens, panels, door leaves and fittings.

It is not applicable to

- edge effects occurring outside the perimeter of the specimen,
- energy transfer due to solar radiation on the specimen,
- effects of air leakage through the specimen, and
- roof windows and projecting products, where the external face projects beyond the cold side roof surface.

NOTE For roof windows and projecting units, see the procedure given in ISO 12567-2.

Annex A gives methods for the calculation of environmental temperatures.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7345, *Thermal insulation — Physical quantities and definitions*

ISO 8301, *Thermal insulation — Determination of steady-state thermal resistance and related properties — Heat flow meter apparatus*

ISO 8302, *Thermal insulation — Determination of steady-state thermal resistance and related properties — Guarded hot plate apparatus*

ISO 8990:1994, *Thermal insulation — Determination of steady-state thermal transmission properties — Calibrated and guarded hot box*

ISO 9288, *Thermal insulation — Heat transfer by radiation — Physical quantities and definitions*

ISO 10211, *Thermal bridges in building construction — Heat flows and surface temperatures — Detailed calculations*

EN 12898, *Glass in building — Determination of the emissivity*

IEC 60584-1, *Thermocouples — Part 1: Reference tables*